This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1.-2. (Previously Cancelled)
- (Cancelled Herein)
- 4. (Previously Cancelled)
- 5.-20. (Cancelled Herein)
- 21. (Previously Amended) A method of ranking the immune response of a test animal within a population of animals under stress comprising:
- (a) immunizing the animals with at least one antigen at least once before the onset of the stress:
- (b) measuring the antibody response of the animals to the at least one antigen at least once before the onset of the stress and at least once during the stress; and
- (c) calculating a mathematical index of the antibody response, wherein the mathematical index is: y = primary antibody response, wherein
 - (i) v is the immune response; and
 - (ii) the primary response is the difference in antibody quantity at a first time point before the onset of stress and a second time point during the stress, wherein the animal is immunized at the first time point before the onset of stress:

wherein a test animal having a y value greater than about one standard deviation above the average of the y value for the population is a high immune responder.

22.-24. (Cancelled Herein)

Appl. No. 09/899,552 Response dated February 16, 2006 Reply to Office Action of August 24, 2006

25.-52. (Previously Cancelled)